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GEO-TECH
BIOCOMPOSITE
MATERIALS



INTRODUCTION

Biocomposite is a composite material that made up of natural and biological origin that are eco-friendly. The biological origin that used are sea mango fillers. The main interest of bio-composite are environmental friendly and biodegradable based upon the filler added. The light weight bio-composite based on sea mango as a natural filler. These bio-composite can be fabricated using a cheap and breakthrough technology by optimized the formulation and processing conditions.

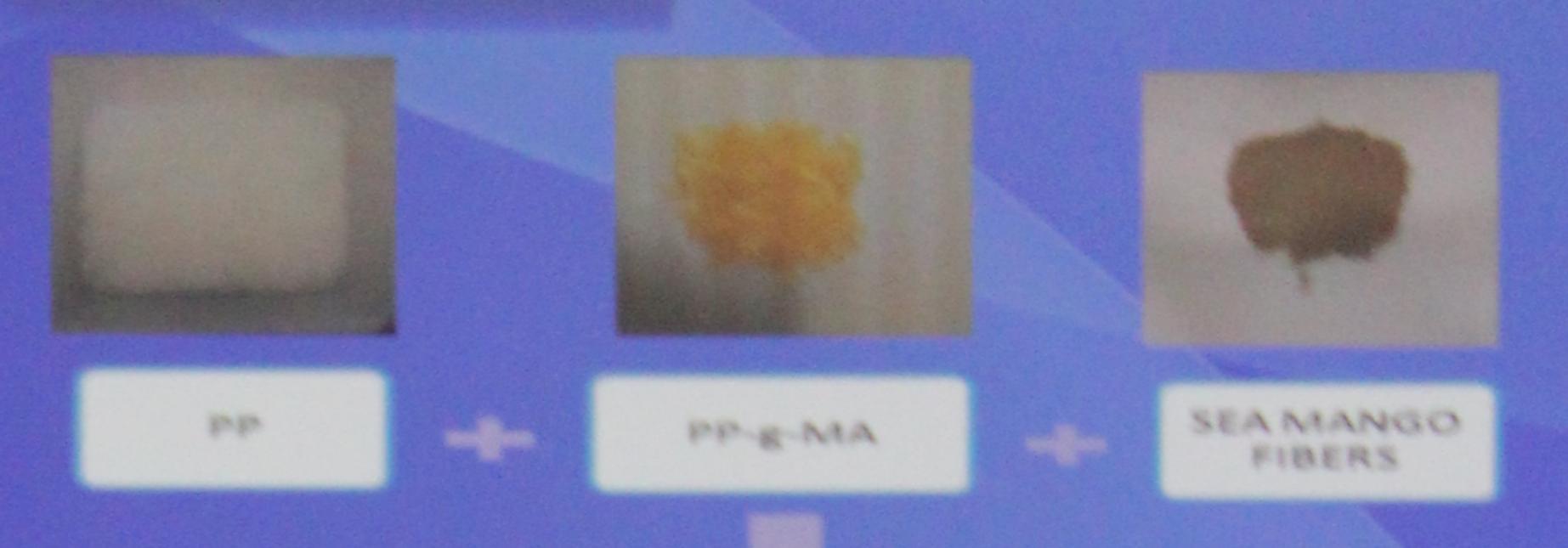
NOVELTIES

- Reduce the use of core materials or PP matrix that derived from petroleum based.
- 2. The use of agro-waste materials and reduce cost of production.
- 3. Environment objective: Sea mango utilize as filler which help reduce the use of plastics.
- 4. Light structural composite and high modulus of elasticity.
- 5. The ability of the material to be molded to meet almost any desired shape.
- 6. Sea mango is a renewable natural resources and reduce the carbon dioxide emissions.

COMMERCIAL POTENTIAL

- Low cost production than the commercial product which derived from 100% petroleum core- materials.
- Bio-composite with high modulus of elasticity can be applied in protective materials for automotive part.
- 3. Help reduce the use of petroleum-based materials which is non-renewable.
- 4. Ease to process with low viscosity.

METHODOLOGY

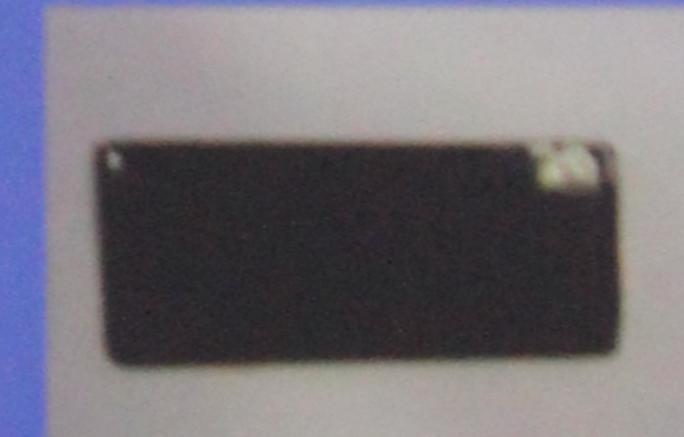


MELT COMPOUNDING

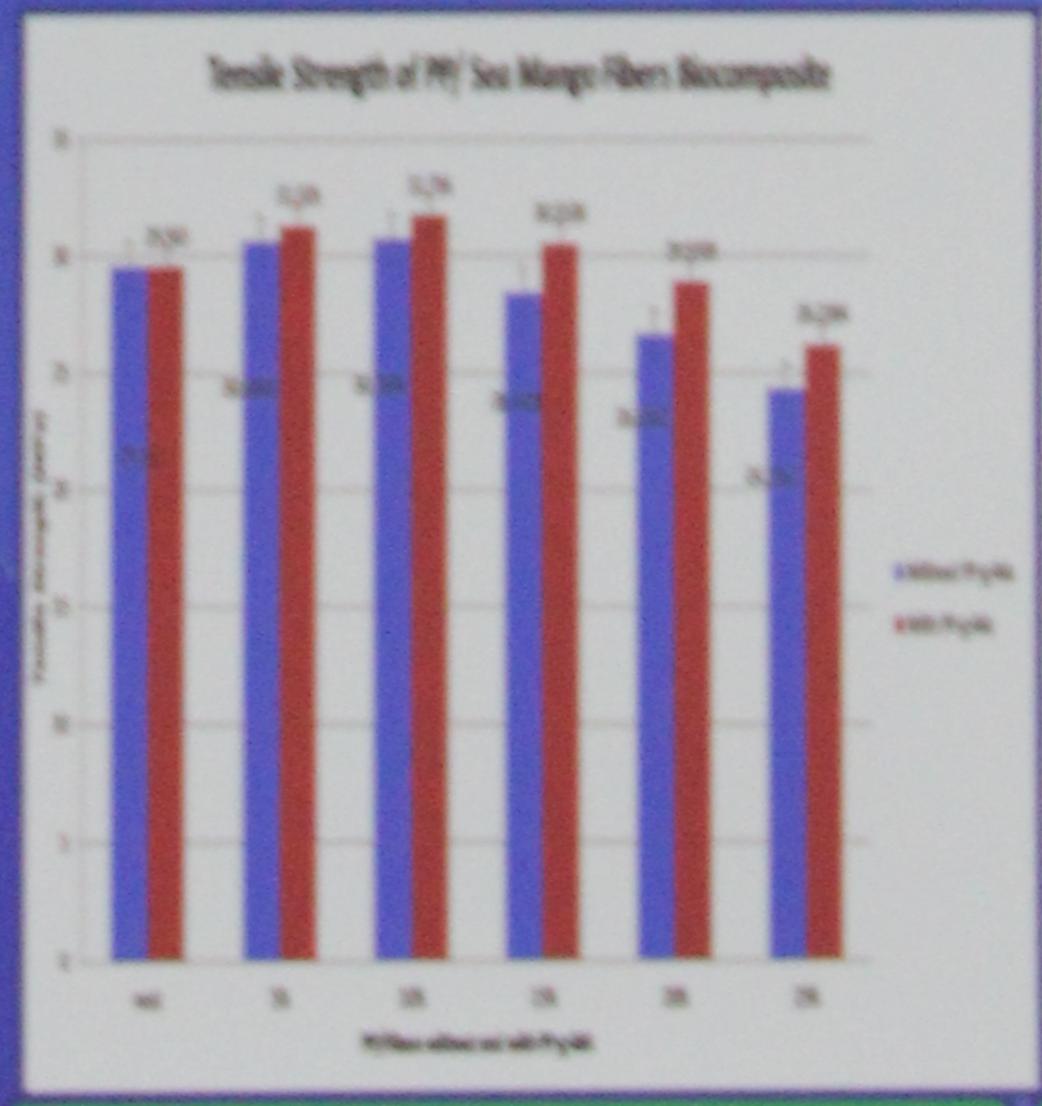
COMPRESSION MOULDING

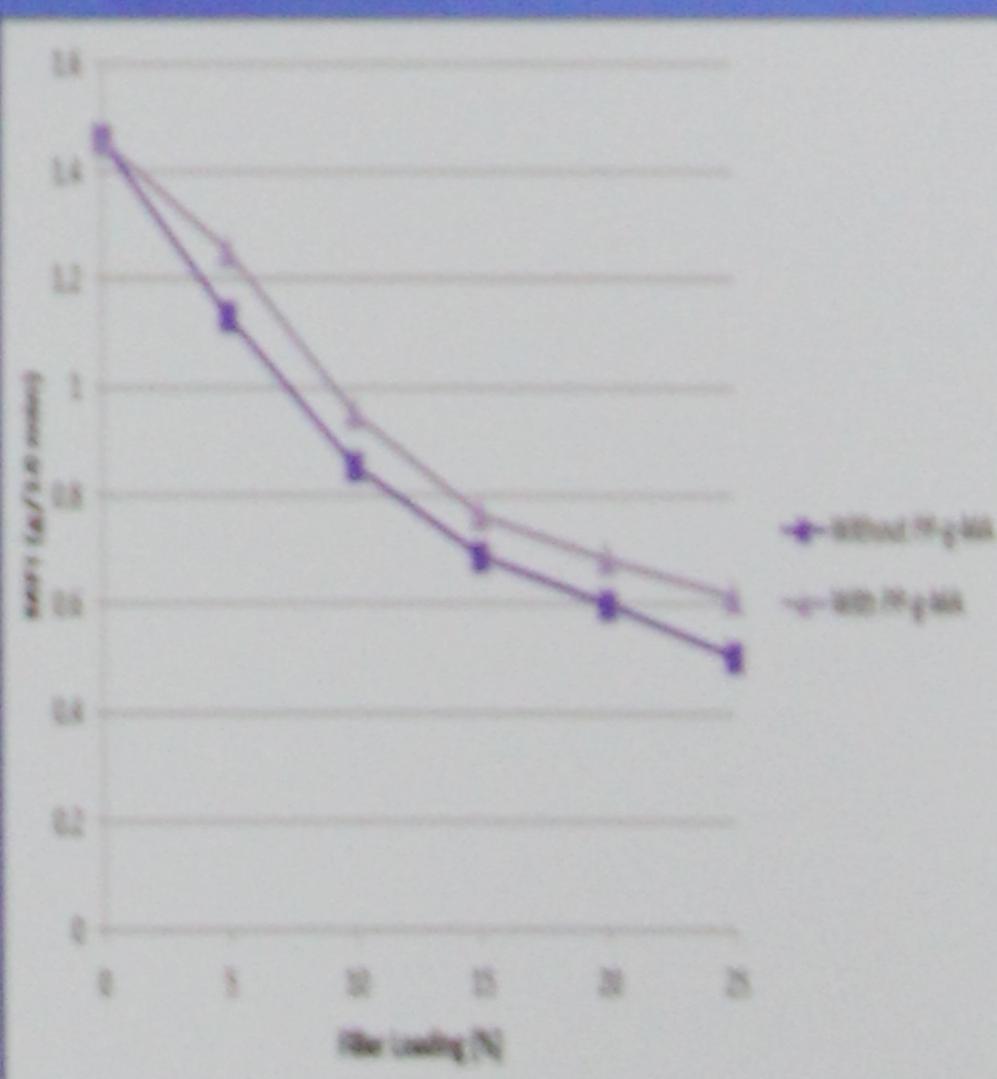
BIO-COMPOSITE PRODUCTS





RESULTS





Tensile Strength

Flow Behaviour

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